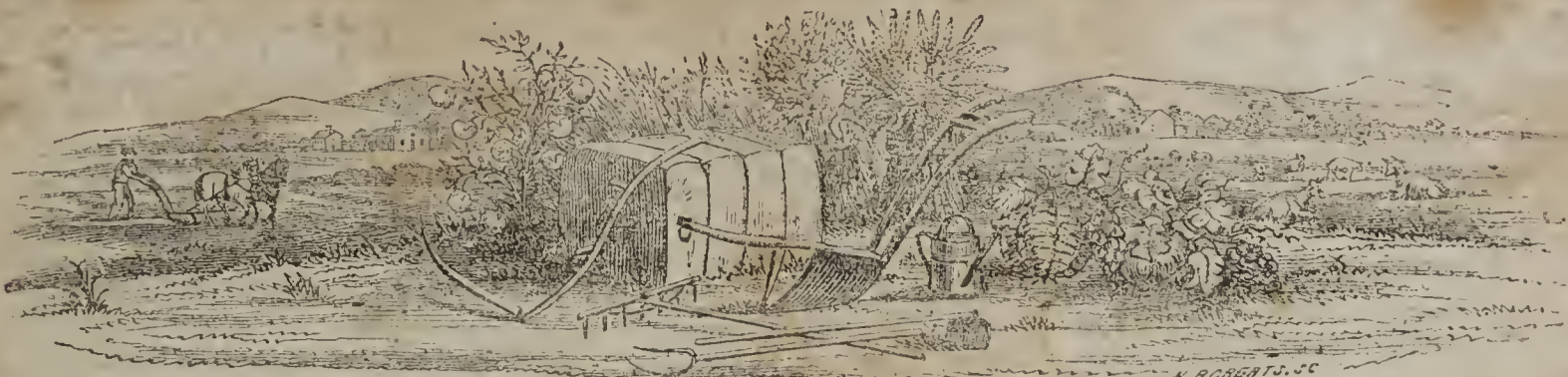


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FARMER AND PLANTER.

DEVOTED TO AGRICULTURE, HORTICULTURE, MECHANICS, DOMESTIC AND RURAL ECONOMY.

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Manures.—No. 4.

Their Uses, History, Modes of Preparation, Comparative Value, Rationale of their Causes of Action, Etc. Etc.

BY PROF. J. J. MAPES

Fertilizers in general—continued.—Some properties are common to all manures, and among these may be enumerated the power of absorbing moisture. The atmosphere is at all times charged with more or less moisture, hence a pitcher filled with ice-water and wiped dry on its outside, will soon be found to be covered with drops of water, and the common expression is, "that the pitcher sweats;" this water is the moisture of the atmosphere, condensed upon the outside of the pitcher; and its quantity is so considerable, that it is not difficult to understand why the surface of the earth becomes covered with dew at night in summer, and with white frost in colder weather. Leibig has shown us, that the atmosphere contains many gasses useful to vegetation, and that these gasses are brought to the earth by dews and rains, in combination with the water—consequently it is desirable that the soil should be enabled to receive both moisture and gasses, and to retain them for the use of the growing plants. This

property of the soil depends much upon the fertilizers used, each differing in its power to absorb moisture. The following results are given by C. W. Johnson in his Essay on Salt, pp. 8, 19. In these experiments the animal matters were employed without any admixture of straw.

1000 parts of horse-dung, dried in a temperature of 100°, absorbed by exposure for three hours to air, saturated with moisture of the temperature of 62°, parts.....	145
1000 parts of cow-dung, under the same circumstances, absorbed.....	130
1000 parts pig-dung.....	120
1000 do sheep-dung.....	81
1000 do pigeon-dung.....	50
1000 do of a rich alluvial soil.....	14
1000 do of fresh tanner's bark.....	115
1000 do putrified tanner's bark.....	145
1000 do refuse marine salt, sold as manure.....	49½
1000 do soot.....	36
1000 do burnt clay.....	29
1000 do coal ashes.....	14
1000 do lime.....	11
1000 do sediment from salt pans.....	10
1000 do crushed rock salt.....	10
1000 do gypsum.....	9
1000 do chalk.....	4

The same author further remarks: "There is reason to conclude that some manures act as stimulants to plants, and excite them to a more vigorous growth; it is probable that the saline matters of farm-yard composts operate in this way, and that saltpetre and other saline fertilizers do the same." I have often had occasion to notice the increased luxuriance and productiveness of fruit trees, such as cherries and pears, by an application of common salt. Priestly made similar observations. "To try," he says, "the effect of different stimuli on the roots of plants, I put into phials containing 1½ ounces of common water, small quantities of common salt, from 1 grain to 12, and more. In all those that contained more than 12, the plants died immedi-

ately; but in that phial the plant lived a few days, and the rest died in their order to that which contained three grains of salt, which seemed to grow as well as the plant in simple water. And it was remarkable, that not only the plant, but also those which had died, seemed to flourish more at the first, than those which had grown in simple water; and that which had three grains of salt, and also that which had one grain, continued to live after the plant in simple water was dead. This, too, was the opinion of Darwin, and is that of some of the best modern chemists. 'It seems,' to give the words of Dr. Thompson, 'pretty plain, that the vessels of plants are made to contract by various stimuli: the experiments of Coulomb and Saussure render this probable, and an observation of Dr. Smith Barton makes it next to certain. He found that plants growing in water vegetated with much greater vigor, provided a little camphor was thrown into the water.'"

Our own experience accords fully with the above. In 1847 we commenced a flower garden, much later in the year than was usual for planting annuals; and after the plants appeared above ground, we watered them night and morning with a very dilute solution of carbonate of ammonia—the consequence was, that their flowers were not only earlier, but finer than those planted at earlier dates on better prepared soil in our immediate neighborhood. We have frequently since applied water to Orleanders, in which was dissolved in about one thousandth part of its weight of carbonate of ammonia, and by this means, stimulated the plant to greater action.

A similar treatment, it will be recollected, was suggested by Mr. John

Galbraith, in his paper on the grape vine, in our first number. Grape vines sometimes cease to grow in midsummer, neither fruit or laterals increasing; in such case, water freely with guano water for three days, and then apply a weak solution of potass, and the vines will proceed with vigor.

It is often remarked that land becomes warmer by the addition of manures, and the listener is left to suppose that this warmth is occasioned by similar causes to those arising from fermentation, as in dung-heaps, but such is not the fact: the ordinary quantity of manure used to the acre is not sufficient to produce such an effect—the plowing of it in, however, and consequent admission of air and moisture, causes a change in the quality of the soil, but no positive amount of heat arising from the fermentation of the manure can be anticipated. The temperature of the earth, although not altered by the direct action of the dung, still has a very sensible effect on its duration: Thus, in a free soil, the manure is sooner decomposed and rendered available to plants as the soil is warmer, whereas in a clayey or cold soil, the manure will not so soon be exhausted, but remain sometimes to even double the time to which its effects can be traced, when used in soils more sandy. The color of the soil, however, has an effect upon its temperature, as black surfaced soils will receive more heat and impart it to its substratum, with more rapidity than those with lighter colored surfaces; and thus manures which blacken the soil, would in fact assist to warm it.

The mixture of manures is also of the highest importance, and the same quantities of horse, cow and pig manure, if used separately, will produce much less beneficial effects than when thoroughly intermixed with each other—under the latter condition, their constituents, by closer promixity, are enabled to form new chemical combinations required by plants, and thus to produce more beneficial effects. The quantities of manure may also be increased with profit by mixing through the fermenting mass, those refuse substances which cannot disorganize themselves; such as woods dirt, pond muck, old sods, head lands, weeds, &c.; for not only are these materials rendered available as manures by such composting, but their carbonaceous matters receive and retain the excess of ammonia and other volatile matters which are given off during the fermentation of the

more highly azotized portions of the mass. Again: the mixing together of some manures; not only increases their general powers, but gives them new ones, which neither possessed in their separate states—thus, salt and soot, separately applied, will produce no such results as when previously mixed together. This produces the most remarkable effects on carrots, but when used separately, no such results ensue. Tanner's bark, although slow in its action when used by itself, if previously mixed with stable manure and fermented, produces results of the most beneficial kind.—Lime and salt, when mixed as stated in our article under that head, forms a new compound, chloride of lime and carbonate of soda, which acts with great energy in the muck-heap, and renders any organic matter available which was before inert, and that, too, without any loss of ammonia; whereas, if lime is used in a similar manner, without being decomposed by salt, much of the ammonia would be driven out from the mass.

Many manures should be applied in their simple form, such as green crops, which, from the ease with which they decay, require no chemical agents for their decomposition. Sea-weed, also, should never be placed in the compost heap, but carted immediately upon the soil and plowed in: this is equally true of all those manures containing large quantities of ammonia, such as urine, and the liquor from gas works; if these are composted at all, it should be with charcoal dust, gunpowder, well decomposed peat, or such articles as can readily absorb and retain ammonia.

Pig-dung is well known to cause most of the brassica tribe to become club-footed, but if mixed thoroughly with charcoal dust, or even hard coal ashes, for a month or two before using, may then be drilled in with turnips in the same proportion as bone-dust, and with equally beneficial effects.

Manures are often wasted from being applied to soils where they are not required.

The useless exposure of manures to the action of the sun and air, is also to be deprecated. Many experiments have been made, which clearly prove that the common cattle-yard practice causes a loss of 75 per cent. in the value of manures, as compared with the results from a similar number of animals when stable fed, and the manures daily placed under cover—and a still greater saving may be

made, by composting as before explained.

Too little attention is paid to the comparative bulk of different fertilizers: those who buy manures and are compelled to carry them a few miles, should not overlook this fact, that in many instances the cost of carriage is greater than the cost of the manures, and therefore those manures which occupy but little space, have really a much greater comparative value than those which are more bulky.

Our next paper will treat fully of farm-yard manures.—*Working Farmer.*

(To be continued.)

Colic and Bots in Horses.

The horse, to the farmer, is the right arm of his power, yet his diseases are the least known, and the least intelligent prescribe with confidence for all his ailments. There is, perhaps, not one of our domestic animals whose whole natural habits are so changed by his treatment. Instead of the green herbage and free air of his natural pasturage, he is confined to close stables, and fed upon heating and inflammatory food; hence, in his domesticated condition, no animal is subject to such violent inflammations, which run their career to gangrene and death, with such fearful rapidity, that his health has been classed as one of the three most uncertain things, viz: "the beauty of a woman, the love of a boy, and the health of a horse." Whatever be the seat of his disease, he has but one mode of indicating suffering. Thus, a foundered horse will roll violently from the pain of spirits of turpentine poured into his feet, and with inflammation of his lungs he puts his nose to his flank.—What presumption, then, is it to administer whiskey, spirits of turpentine, and a score of other inflammatory medicines to an animal already suffering from a dangerous inflammation of some vital organ. I have seen somewhere an allegorical painting of a physician represented as a traveller in the dark, his medicine a bludgeon in his hand, the patient his dog, the disease a wolf attacking the dog, and the physician laying on with his bludgeon, knocking over the patient as often as the disease. How much worse must the poor horse fare in the hands of brutality and ignorance.

Of horses examined by myself after death, one feeding heartily and apparently well at night and found dead in the morning, had suffered from violent inflammation of the stomach; the cuticu-

lar coat having separated from the muscular—a second died from inflammation and gangrene and of the large intestines—a third from inflammation and gangrene of the small intestines—a fourth from inflammation of the lungs. In every instance a destructive inflammation of some vital organ. Yet the practice in every case was to administer remedies calculated to aggravate the inflammation. Horses have doubtless often got well in spite of all these remedies—but with an animal predisposed to such inflammatory attacks, would it not be the more prudent plan to adopt another class of remedies? Bleed freely first, and then administer mild cathartics, with large doses of laudanum, to relieve pain, spasm, or stricture. The effect of a large dose of laudanum is the reverse of a small one—it produces the most perfect relaxation. This remedy would be as efficient in colic, and would guard against its termination in inflammation. A weak solution of ley is often a safe and efficient remedy in this disease, the ley operating as super-carbonate of soda.

Where the distension was such as to form dangerous accumulation of air, the medicine for hoven cattle, viz: 2 drachms of the chloride of lime dissolved in two quarts of water, to be repeated within an interval of an hour, if necessary, might answer perfectly well. The air generated in the stomach or intestines of the horse is the same as that generated in hoven cattle, viz: sulphuretted hydrogen. Upon introducing the chloride of lime into the stomach of the hoven animal, the chlorine drops the lime, unites with the hydrogen, and forms muriatic gas. This gas is absorbed by the water of the stomach and forms muriatic acid, its bulk being reduced a thousand fold; the muriatic acid unites with the lime and forms the harmless muriate of lime. Thus has science by her deductions introduced one of the most valuable of cattle medicines. This is no theory, but found in practice to be true in every particular. With cattle it should be administered by means of the stomach pump.

In Europe, veterinary surgeons and physicians are educated with far more care to administer to their domestic animals than we often educate our physicians to administer to ourselves. They have there the same parasite, the bots or grubs that we have here, yet those veterinarians consider it as harmless. "The bots cannot, while they inhabit the stom-

ach of the horse give the animal any pain, for they are fastened on the cuticular or insensible coat. They cannot be injurious to the horse, for he enjoys the most perfect health, while the cuticular coat of the stomach is filled with them.—They cannot be removed by medicine, for they are not in that part of the stomach to which medicine is usually conveyed; and if they were, their mouths are too deeply imbedded in the mucus for any medicine that can be safely administered to affect them."

If the horse is opened the moment he dies, they are never found to have attacked the stomach. If he is killed suddenly, in health, and lies until he is cold, they are found always to have eaten through the stomach. The bots are licked off by the horse and carried with the food into the stomach, where they attach themselves firmly by means of a hook on each side of the mouth to the mucus membrane. When full grown, they pass out with the food, burrow in the ground and transform into the fly.—When the horse dies and his food fails, it is probably instinctive in them to cut their way out. In a horse that had died from an inflammation of the stomach, the mucus coat having extensively separated, they were found gathered upon the sound parts which they had cut through, the inflamed portion having no trace of injury from them. In supposing that grubs are a disease of the horse, we have attributed effects during life to causes happening after death—and what nostrums have been forced down the throat of the poor horse to cure this imaginary disease, and with what confidence has the stomach, perforated after death by the grubs, been shown as the cause of death. TH. J. RANDOLPH.

—*Southern Planter.*

Short and useful Rule.

Solid feet multiplied by 45, and divided by 56, gives bushels of 2150 2-5 inches each.

N. B. There cannot be a shorter rule to change solid feet to bushels than the above.

EXAMPLE.—How many bushels in a wagon-bed, box, or granary, eight feet long, four feet wide, and two feet deep?

SOLUTION.—Eight, four and two multiplied together, make sixty-four solid feet; which, multiplied by forty-five, and the product divided by fifty-six, gives 51 3-7 bushels.

You can deduct for space occupied by cobs; generally about one-half.

Indiana Farmer.] MERCHANT KELLY.

Deep Plowing.

As a general thing the soil must be deepened before it can be perfectly improved. One acre of soil 12 inches deep is worth more to make money from, by cultivating it, than 4 acres 6 inches in depth. Thus, admit that a soil 6 inches deep will produce 14 bushels of wheat, and that 12 bushels will pay all expenses and give 2 profit. Four acres of this land will yield a net income of only 8 bushels. Now double the depth of the soil and the crop, making the latter 28 bushels, instead of 14 per acre, and the former 12 inches in the place of 6; 15 bushels instead of 6, will now pay all the annual expenses, and leave a profit not of 2, but of 13 bushels per acre.—*Family Visitor.*

Lice on Cattle.

MR. EDITOR:—It is not often that I have it in my power to offer anything to the public; but I think it right that each one of us should give to all the benefit of his experience, more particularly when he can make nothing by keeping it to himself and getting out a patent right. I saw in some agricultural work, perhaps your own, that the water in which Irish potatoes had been boiled, if applied to cows, &c., would kill lice upon them.—I tried it several times with signal success, and a few days ago, ordered my boy to try it upon my cows, which, at this time of the year, generally are full of ticks; the result of which is, that they have all taken their departure. Please publish this for the benefit of all the commons-going cows of the vicinity of our city, and you will have their eternal thanks. RICHARD HILL, JR.

Southern Planter.]

False Adages.

"The farmer who cannot maintain his land in high condition by the manure made upon his farm, is not worthy the name of husbandman! This may be done by keeping a large stock of cattle, and letting nothing go to waste."

The above adage is but a variation of the same sentiment expressed in a thousand forms, from the days of Tully to the present time.

The farmer who pursues the course there recommended, will for a time add to the organic amendments of his soil, and this he could do by many other systems. But does he, or can he, by raising cattle for sale, keep his soil *ad infinitum* in the same condition? We assert that he cannot, and practice has long proved our assertion. The grazing farms of England, by the best husbandry of the

kind recommended in the article quoted above, failed eventually in producing the crops of former times, and nothing but the aid of chemistry has enabled the farmer to correct the difficulty. There are certain constituents of the soil, necessary for the development of its full powers, which cannot be restored to the soil by the use of the excrement of animals fed upon the farm alone, and these are those which compose the materials parted with, which are not of organic origin. Thus while we admit that the nitrogenous portions of milk sold from a farm may be restored to the soil by the solidification of the constituents of the atmosphere, in the form of clover and other green crops to be plowed in, the phosphate of lime, potash, and other inorganic constituents of milk, cannot be thus restored, and so much of these ingredients as are contained in the products of the farm which may be sold, are forever parted with, and must be restored from other sources to keep the soil in full heart. Who does not know that every *bone button* exported from a country, is carrying with it an amount of phosphoric acid in the form of phosphate of lime, capable of supplying this material to many pounds of wheat or other grain, and that its absence reduces its capabilities? Must not then the 200 lbs. of phosphate of lime contained in the bones of an ox sold from the farm and originally obtained by the ox from the soil, be replaced before the soil can be in the same heart as before parting with it? Can phosphate of lime be had from the atmosphere? If so, why do the graziers of old countries find it necessary to buy American bones to manure their farms? Why are the mineral phosphates of America carried across the ocean and sold at \$35 per ton, if not to renew the phosphate of lime sent from European farms in the form of animal's bones? A soil replete with inorganic substances, may be improved by keeping a large amount of stock, and thus adding organic matter by the use of the manures to render the inorganic matters of the soil more available to plants; but this cannot be done forever, and no judicious farmer will continue to work his land in that way, without the occasional addition of such amendments as he must know are daily being parted with from his soil.

Why is our government so anxious to stand on the same footing as other nations with the South American governments in relation to the guano trade, if not to ensure additions of phosphate of

lime, potash, and other constituents to our soil? They well know that every day in the year finds a British vessel at the New York docks loading with bones and pot and pearl ashes, and that these have raised the grain crops of England, while our own have been lessening from old acres, however judiciously cultivated by the home system. Our continent is being denuded of much of the raw materials of which plants are made, and although not so rapidly as the older countries of Europe, still the process is going on steadily and surely, and the infernal adage at the head of our article should be looked at with a jealous eye. A few years since a mineral called *Chlor-apatite* was discovered in New Jersey, and at Crown Point, Lake Champlain, by Dr. Jackson and Mr. Francis Alger, of Boston. It was found to contain large quantities of phosphate of lime, and immediately it was shipped to England, and its export is now progressing to an immense extent. It sells there for \$35 per ton in large lumps, and the farmers there, after paying a profit on the price named above, grind it at large cost, and dissolve it in sulphuric acid to make super-phosphate of lime before using it. Two hundred English ships are engaged at the same time in bringing guano and other fertilizers from the continent of America and elsewhere, to renew what has been parted with from the soil in the form of crops, animals, &c., &c. Does any one doubt that English grazing farmers find it necessary to use these amendments, or will they assert that they do not save with peculiar economy all the excrement of their animals, and if they find these amendments necessary and profitable, why should American farmers be exempt from such necessity?

Adages which were applicable fifty years ago are not so now. The old states are nearly worn out as agricultural states, except in such localities as have been renewed by the use of the missing or used up constituents of the soil. It has been said that "public report was the public liar," and we are sometimes tempted to believe it when applied to current adages, which would "be more honored in the breach than in the observance."

There are certain constituents missing from most soils, and an increase of their quantities are valuable in all soils; among them we may name phosphoric acid and ammonia, in whatever form it may be presented.

It is this fact which has induced us to

urge upon capitalists the manufacture of super-phosphate of lime with the proper admixtures for the use of farmers, and which we hope will become in general use, and save the old as well as the new farming districts from being denuded of such constituents.—*Ed. Working Farmer.*

The Cultivation of Grass.

GEN'L THOMAS B. SCOTT—Dear Sir—When I last had the pleasure of seeing you, I was pleased to hear you speak of your experiments in Agriculture—more especially the success that had attended your efforts in cultivating the artificial or exotic grass. After seeing your clover field, and hearing you speak of having saved two crops, or cuttings, of hay, I determined at once to order seed and give it a fair trial upon our black lime land.

Will you be pleased to inform me at what period of the year the seed had best be sown; what quantity to the acre; what preparations of land, how covered or put in—with the whole *modus operandi*?

I feel assured that our husbandry and domestic economy may be greatly improved by cultivating the perennial grass, and by paying more attention to our invaluable native grasses, which not only afford good pasturage, but from which millions of pounds of the best hay might be saved, equally as good as the northern hay, and more valuable for our mules and oxen than fodder which costs one dollar per cwt.

The result of some experiments of Maj. S. Powell, in saving hay from the common crab grass, and the oat or crow foot, demonstrates the profligacy and want of economy upon the part of southern agriculturists; and shows that the spontaneous crop of crab grass that grows on much of our land, is really worth more than the crop of corn. He measured two acres,—one on the high land, the other in the bottom. Off of the first acre, he saved 2,675 lbs. of nicely cured crab-grass hay; off of the second acre he saved 3,987 lbs. He gathered 36 bushels of corn off of the first acre, which at 60 cents, is \$21 70. The hay we think is worth a dollar per hundred weight.; from which it is shown, that the grass crop is much the most valuable. He is of the opinion that his corn land would have yielded from a ton to a ton and a half of hay, having 700 acres in corn. At the above estimate, 700 tons of hay could have been saved that, at \$20 per ton, would be worth more than the corn and cotton crop.

But I will not trespass further on your time and patience. Hoping to hear from you soon, with great regard

Your friend, and ob't serv't.

N. B. POWELL.

Chunnamuggee, Ala., Dec. 25, 1851.

MOUNT MEIGS, Jan. 20, 1852.

Dear Sir—Absence from home must plead my apology for the delay in reply to your very interesting letter of the 23d December last.

I have, in the course of my agricultural life, experimented with most of the exotic grasses, but whether from unsuitableness of soil or climate, or both together, have met with indifferent success with all save Clover, Vetch, and Herds-grass.—The vetch will grow and thrive upon any soil that is dry and in tolerable heart; should be sown about the first of September; will spring up about the first of October thereafter, and affords good grazing for sheep throughout the fall and winter, and upon the approach of spring, grows with great luxuriance—and I hesitate not to say, will yield from that time till it runs its course, as much as any article in nature, either in grazing or to be mowed for hay; it generally runs its course by the first of June to the middle of July, according as the season may be moist or dry. The first crop of vetch should be suffered to go to seed upon the ground, after which you will have a pasture to the end of time.

Herds grass will grow well upon any tolerably stiff land—and if a little low and inclined to be wet, so much the better. You will be delighted with it; and should you happen to sow it upon some of your rich low land, with about a peck to the acre, you will have ample reason to congratulate yourself. The seed are very light and chaffy, and should be dampened and mixed with leached ashes, and sown on a still day.

As to red Clover, I have been long of opinion it could be made to grow, by a little coaxing, upon any tolerably rich soil, having a good clay sub-soil, by dosing the land with eight to twenty bushels of ashes, or lime, which is better; and the young crop in early spring to have a bushel of Plaster of Paris scattered over it.—To insure a good growth of clover, it is indispensably necessary to plough very deep, say a foot to fourteen inches—the ground well harrowed, clods broken down, and the land in all respects subjected to the most perfect tilth; to be sown about the first of September or even earlier, at

least two pecks to the acre, and the seed slightly scratched in by a thorny brush or very light harrow. Two pecks are more than is recommended anywhere at the North; but my experience tells me, unless you sow enough to take possession of, and occupy, every vacant space, you will be apt to raise as much weeds and crop grass as clover. Where the clover comes up thick and grows awhile, one bunch helps to shade and thereby sustain another; and I am convinced that all the failures at the south result mostly from sowing too few seed—not only of clover, but of all other kinds of seed. If you design sowing with a view to pasturage principally, I would recommend having a mixture of clover, vetch and herds grass, without materially diminishing the quantity of seed of either.

It is not at this day a question whether clover will grow upon prairie land.—Many years since, our former Senator, in Congress, D. H. Lewis, forwarded some clover seed to his brother, Mr. Hamlin Lewis, of Lowndes county, who scattered them upon the summit of a bald prairie, whence they spread over a considerable space and grew most luxuriantly.—Col. Alfred King, formerly of this neighborhood, also had some clover, in one corner of his yard, pronounced by some Kentuckians equal to any in their country. The fact seems to be well settled, that clover to do first rate, must be sown upon land naturally calcareous, or made more or less so by the application of lime—and I have been long satisfied that no part of the world can grow better clover than your prairie lands. I have four acres in clover; and upon as much as one acre, in one corner of the lot, it grew to the height of thirty inches, and formed the densest and most luxuriant covering I ever saw. If you have not yet sown, I would advise you to do so by the middle of February, and shall be glad to hear the result upon your lime lands about the first of May next.

With much respect, yours, &c.,
—Southern Cultivator. T. B. SCOTT.

Rainy-day Thoughts.

The following "Rainy-day thoughts," which we take from one of our most excellent exchanges, the Southern Planter, will apply about as well to South Carolina, and other Southern States, as to old Virginia. We fully agree with the writer in most of his "thoughts," and particularly in his concluding remarks, applying the same to South Carolina, should the Farmer and Planter fail for the want of adequate support.

Eds. F. & P.

MR. EDITOR:—The necessity of a thor-

ough improvement in the agricultural condition of eastern Virginia is admitted by all. Our lands originally rich, have been so greatly impoverished that they hardly repay the cost of ordinary cultivation; and we must either abandon them for more fertile regions, or adopt improved methods of cultivation and management. The latter will be preferred by every true Virginian; and it is fortunate for all such that a few men, of greater sagacity and energy than the mass, have established the fact that our exhausted fields may be made productive by the judicious use of means within the reach of all. Among these, besides the manures that can be made on every farm, are guano, plaster, lime and clover, thorough draining and deep plowing. It is true, that many are unable to procure lime at prices that would warrant its free use; and it may be true, that without lime many portions of old Virginia cannot be permanently improved; but the facilities for transportation are increasing, and this difficulty will probably be diminished.—In the mean time, it is certain that we can employ the other agents enumerated, with confidence, and that they will quickly repay their cost and leave a surplus of profit to be expended in lime for more permanent improvement.

My object, however, is to notice some other means for the renovation of our fallen fortunes, not so frequently mentioned as the above, but hardly less important. It is beyond doubt that one prolific source of the evils to be remedied is the practice of entrusting our land to the care of hired agents unfit for the task. Many of them are both ignorant and dishonest. I do not use the latter term in its restricted sense, as a synonym with thevish, but in its more enlarged signification, as implying the opposite of that virtue which prompts its possessor to do to all others as he would have them do to him; which prompts an agent, not merely to refrain from doing a positive injury to his employer, but also to promote his employer's interest to the utmost of his ability. If the agent fail to exert all his skill and energy, or if he waste his time in gadding about, he is surely not acting as an honest man: for he is paid to promote the interest of the principal, and to devote to it all his time. Certainly this is his simple duty; and it is readily conceded that some overseers have a disposition to do it. But the many do not come under this exception; and some who do have zeal without knowledge.—Now, if the owner would cast away all

false pride and selfish indolence, and apply himself to the knowledge of his interest, and the management of his business, such agents might be dispensed with: and who can doubt that the change would be productive of vast benefit?—Here and there is a planter or farmer, who by necessity, are obliged to rely on an overseer; let him employ one; but let him select a man qualified for his business, and let him pay such wages as an efficient and faithful manager merits.—Other land holders are able to give a partial supervision to their estates, and such might employ *lads*, (if in this age of steam, progress and emancipation, any of that class of mankind are extant) and direct them in all things. But whenever practicable, the owner should manage his estate without the intervention of a stranger between the master and the slave.

Another means is suggested by the fact that the farmers of Eastern Virginia buy, annually, large supplies of beef, butter, hogs and horses from the West. If we would raise, every man his own supply of these, the gain would be great. We would consume upon the land more of its products, and would be enabled to return to the soil what we now sell for money to pay the western grazier. No surer mode of impoverishing land can be invented than the practice of *exporting* beyond its limits *everything* it produces. Such is not nature's method: the vegetation of this year's growth derives support from the decay of last year's crop, and the forest sheds its harvest of leaves to repay the earth for its bounty, and to provide new stores of food for the coming spring.

Another means of promise is the association of agriculturists in county societies, subordinate to a State society, for the purpose of creating an agricultural interest in the State, similar to the great manufacturing interests of the North; an interest to be felt in popular elections and the halls of our General Assembly. We want many things which we are not likely to get without such an interest.—We want an agricultural chemist; and a board or bureau of agriculture. We want inspectors of guano, plaster and other mineral manures, who can ascertain their true value. We want the means of inducing the application of science and industry and skill to the invention of machines, and the discovery of better practices in agriculture. We want relief from what the demagogue terms the poor man's law (the fense law); and we want

a universal relief from demagogues in general. We shall not have these wants supplied till we learn the strength of union. The old fable of the bundle of sticks must be acted out by the land-holders of Eastern Virginia, ere our hearts shall be gladdened, by seeing the promise of the suppliant candidate redeemed by the independent representative. But more than this is to be effected by organized associations. The effects already faintly shadowed forth, would soon mount up to a crowning triumph: agriculture would be placed where it ought to be, in the public esteem. She would take her merited rank in front of the secular avocations, and *her professors*, as truly "professional men," as lawyers and doctors who affect to look down upon them, would wield then the power to which their numbers entitle them now. The respectability of agriculture would be recognized, and the talent and intelligence of the young would no longer seek other paths of distinction: for agriculture would be a **POWER** in the State, controlling all other powers.

Yet, another means for the potent regeneration of Virginia agriculture, must be mentioned: it is the liberal and hearty support of a journal, ably conducted by a Virginia agriculturist, and devoted to our interest. You must pardon me, Mr. Editor, if I make you the trumpeter of your own praise: it is not for Cæsar, but for Rome. The Planter is the journal intended. During its brief existence it has doubtless repaid its patrons ten fold; and some who sneer at it would be surprised, if they would look into the matter, to find that it had given them good for their evil; some judicious suggestions they have had, or some important experiment they have got knowledge of, from a subscriber to the Planter, has had its origin in the "book" they ridicule.

But the disposition to sneer is passing away, for it is becoming manifest to all that book farmers are the best farmers.—An intelligent traveller said to me, as we rode by a dilapidated church in a county not famous for good morals, that he always estimated the character of a community by the condition of its houses of worship; he was sure of finding a moral and orderly population around well built and well preserved meeting houses, and the reverse. It is a safe rule; but not safer than it is to estimate the character and condition of an agricultural community by the degree of support they give to agricultural journals; and if the Plan-

ter fail for want of subscribers, I, for one, shall despair of Virginia, at least, for one generation. To become successful farmers we must be enlightened farmers.

Respectfully, T. T. T.

Farm Management.

BY ALLEN W. DODGE.

The judicious employment of labor is all-important to the farmer. His object should be to accomplish the most, and in the best way, in a given time. But this is not always done by tasking the animal powers to the utmost, unless on emergencies; for overworked to day, they are jaded and less able to work to-morrow.—The real farmer will rather labor himself, and will expect his men to labor, so as to hold out from day to day without exhaustion of nerve or spirits; labor steadily and not flinchingly; diligently and not hastily; willingly and not grudgingly. This can best be done where the farmer himself works with his men, and leads off in the field. If he be mild in his manners, energetic in his movements, experienced in his duties, and withal, a social turn of mind, his hands will prefer to work with him rather than without him. They are thus relieved from responsibility in the execution of the work, as he is on the spot to direct as to its performance. It is, too, for the interest of the farmer, as his men will be stimulated to exert themselves by his presence.

In the absence of the farmer, the most experienced among his men should be entrusted with the management of the labor. On him should be placed the responsibility of seeing that the work goes on properly. If there be no one to take this responsibility, it may often happen that a difference of opinion among the men, each thinking his own the best way to accomplish a certain end, and thus much time is lost, or the end not accomplished. Promptness of decision, as well as energy of action, is of vast importance in many farm operations, and to wait and to dally, is to let the golden opportunity slip by. If it be true—and who can doubt it?—that

"There is a tide in the affairs of men,

That, taken at the flood, leads on to fortune;" So there is a time in farm work, which, taken by the forelock, makes the work already in hand, and that which is to follow, proceed to the best advantage.

The work of to-day, should be done to-day, not put off until to-morrow. There are usually interruptions to the regular performance of out-door labor, by the occurrence of rainy days, holydays, and

sickness, without purposely procrastinating its progress. To-day has its duties, and so has to-morrow; why push into the morrow work that does not belong to it? It is a bad practice to suffer work to drag and get behind hand. If for any reason this happens, the thrifty farmer will put on more force, hire more hands, and bring up the work square. If, on the contrary, farm operations are unduly protracted, if the planting be prolonged into hoeing, and this into haying, and this again into harvesting, they are all performed at a disadvantage, if not a positive loss. What is true of the work of the whole season, is equally true of that of a single day. Let those who labor on the farm rise late, and they lose a part, and the best part, of the day—work ever so hard, they cannot make up the loss. This is sometimes attempted to be done in field work by continuing it after dark, when both man and beast should be at rest, if not asleep. There is daylight enough, if it be only taken at its commencement, to do all the out-door work on a farm. The lark, and not the owl, should usher the farmer to his labors.

As to the right application of labor on a farm, much will depend on the weather, on the number of persons employed, and on the work itself. Many farmers learn the best method of employing labor from long experience; others, from want of observation and reflection, seem never to acquire this tact, and cannot safely be entrusted with the direction of labor. It is by no means, however, so easy a matter, as some seem to imagine, to have the care and disposition of the forces on a farm and to direct them with skill and judgment. There is a vast difference in farmers, in this respect.—Some will accomplish in a given time, with a small number of hands, more than others with a much larger force at their disposal. The former will make every step tell, having each portion of the operations proceeding with a reference to the desired result, and bring each to bear on the whole to the best advantage.—The latter has no plan in his thoughts, and of course no regularity in his operations—here, too many hands, and there, too few; are set to work; here a matter of little present importance is urged on with zeal, there a work of pressing importance is neglected, or languidly performed.

Now while it is true that experience and practice generally teaches the most

judicious method of employing labor, yet, as Von Thaer well remarks in his Principles of Agriculture, "It may be acquired much more promptly and definitely by the observation of certain principles, from which a theory of action may be deduced, without serving a tedious and expensive apprenticeship to experience."

"It is far more difficult," he further observes, "to apply labor judiciously to agriculture, than to apply it to the manufacture of fabrics; for the labor which is required for some particular kind of produce, lasts but a very short time, and then is suspended for a much longer period, during which the farmer depends upon the action of Nature to bring this production to perfection, and awaits the proper season for gathering it. After each species of grain has been sown, it requires little or no attention for some time; whereas, in the formation of any fabric, the labor must be continued from the very commencement until the completion. In order, therefore, that the farmer may make the very best possible use of the powers which he has at his command, he should endeavor to arrange the succession of his crops in such a manner that every hour should be devoted to some preparatory and necessary operation. It is also necessary that he should select the products so as never to have more necessary operations in hand at once, than he can accomplish by means of the powers which he has at his disposal, or which are within his reach."

"He must never undertake many extensive operations at once, or in places remote from each other. He should endeavor, as much as possible, to perform them one after another, and to employ upon them all the men he keeps, from the beginning to the end. This will render the task of inspection easier, and may also tend to excite the emulation which frequently arises when laborers work together under the same superintendence. When only a few workmen are employed on some extensive operation, they frequently become dismayed at its length, and at the little progress they appear to make; they lose all spirit and end by believing that it is impossible to discover whether they are at work at all. In great operations it is always better to have a man or a team too many than one less than is necessary. In smaller operations, on the contrary, it is as well to avoid employing more laborers than are absolutely necessary; they

only hinder one another, and are apt to think that the farmer believed that the work would take more time than actually is required for its accomplishment."

"There are some operations that require a certain degree of temperature; the farmer must always hold himself in readiness to set about these as soon as the fitting time arrives, and must get them done as soon as possible. Should he be interrupted by change of weather, it will be contrary to the rules laid down in the preceding section, to pass to any other extensive operation, unless some particular motive, or an appearance of this change of temperature being of long duration, should seem to indicate such a cause. In such intervals, it is much better to set about some of the smaller operations, which are, in point of fact, of equally as much consequence, and can be very soon completed. It ought to be held as a rule, that no operation once taken in hand should be laid aside, except in case of absolute necessity; and the farmer ought always to hold himself in readiness to resume that which was first undertaken, as soon as the weather will admit."—*Jour. of Agriculture.*

Clay Soils and their Management.

BY PROF. J. J. MAPES.

Clayey soils are often left as pasture fields, from the difficulty of plowing them—their texture rendering this operation more expensive when applied to other classes of soils. The faults attributed to clayey soils are, so close a texture as to prevent the admission of the atmosphere, the free passage of water, and the easy percolation necessary for the roots of many plants. To this may be added, that sometimes the salts of iron, and other substances unfriendly to vegetable growth, are resident in clayey soils, and cannot be removed by the same natural remedies which would wash them from a soil of more sandy texture; the impracticability of surface disintegration by the use of small tools, for the removal of weeds; the cracking of the soil during the heat of summer, and consequent abrasion of fibrous roots. All these too often cause the neglect of clayey soils, but by proper management these difficulties may be removed.

REMEDIES.—Deep and sub-soil plowing will admit atmosphere to cause the necessary chemical changes, and if accompanied by under draining, these changes will rapidly occur. Clays do

not refuse to absorb water, provided an excess does not previously occupy its lower stratum. Judicious applications of lime for under-drained and sub-soiled plowed soils, ensures an alteration in their texture. Charcoal dust, swamp muck, and other cheap organic substances, will mechanically hold the adhesive molecules apart, and by their gradual decay, will leave spaces through which the atmosphere may enter. The carbonaceous matter which does not decay, will always enable the atmosphere and moisture to percolate them. Ridging and back-furrowing in the fall, causes clayey soils to become thoroughly disintegrated by the frequent freezings and thawings of winter. Some of the best garden soils in the world were originally clay soils, reclaimed with the kind of means we have stated. Slight additions of sand may sometimes be made with great benefit. The advantages arising from clay in soils are numerous—for after the kind of treatment which we have mentioned, clayey soils will neither crack nor bake by summer heat; they will retain putrescent manures until used up by plants; for alumina, the chief constituent of clayey soils, has peculiar powers for retaining ammonia, and hence fertilizing materials may be fearlessly and liberally added to a soil entirely capable of holding them until required for sustenance by plants. Salts of iron, and other poisonous materials, sometimes found in clayey, as well as in other soils, are readily parted with from clay soils after they have been properly treated.—Well-reclaimed clays are retentive of moisture, although never excessively wet, nor do they prevent any mechanical difficulties to the travel of the roots of plants. Their texture is always more even than that of other soils, and when rendered suitable for the raising of roots and other crops, the shapes of the products are more regular than in more variable soils. In such soils, beets, parsnips, carrots, and other crops, the value of which is depending in part upon the symmetry of their figure, may be raised with a certainty of success. The difficulties arising from a bad selection in rotation of crops, do not produce such disastrous results in clay as in other soil, for the excrementitious matter of plants, which always annoys the growth of those of the same family following in succession, is received by the alumina, and sooner rendered fit food for future germinations.—There are few clayey soils, that will not

pay, by the consequent improvement in their quality, for the kind of treatment we have recommended—*Ibid.*

Sweet Potatoes.

We regret that the following communication on the planting and culture of this, to the South, most valuable root, came to hand too late for the present season. We are not the less thankful to our correspondent B., however, for his response to our call, which was too late in making its appearance to elicit information applicable to the growing crop. Such however may be treasured up by our readers for another year—for the Farmer and Planter should not be read and thrown aside as of no farther value than for wrapping or other waste paper. On the contrary, it should be carefully filed away for future reference. We have recently had the first and second volumes bound in one, by Mr. Rowland, of Greenville, in a very neat style of half binding, which has so much pleased some of our friends, to whom they have been shown, that they have ordered new unsoiled numbers, to have them put up in like manner:

MESSRS. EDITORS:—Agreeable to your request in the May No. of the Farmer and Planter, I now take my pen to give you my small experience in the planting and culture of the sweet potato. You gave us in that number the experience (or practice) of Mr. James T. Ferguson, which is very good, but it is old fashioned.—The ridge is the present mode here—some very large and some small, and in various ways. I have, for the last few years, planted the easiest and cheapest way I have ever seen practised, and have succeeded as well as by any other mode. I break my land about eight inches deep in the winter, then manure, just before planting, broad cast. I plant in the first part of April—laying off my rows four feet wide, then throw up in a bed, with a good turning plow, four more furrows just as I would to plant cotton that distance. I then cut the potatoes in pieces to prevent them from growing, and to plant further. I chop with a hoe about eighteen inches apart—if I doubt the potatoes coming up well, I put two pieces in each hole then draw a hoe full of earth on them. I draw no earth with the hoe to make a bed until the last working, which I do when the vines will nearly cover the earth. After planting, I plow and hoe just as I do cotton, until the last working, when I use the turning plow again, and draw the earth with the hoe to the roots of the vines. Potatoes are not more troublesome to tend than cotton when cultivated in this way, and not more than half the labor that is required to plant in hills, which is a great saving in work, not only in cultivation, but also in digging. This operation may be performed with the plow, instead of the hoe, if you desire. I do a part of my digging with the plow.

In addition, I consider the potato crop if well managed the most profitable of any other that I am acquainted with the culture of—and yet, its cultivation is but little practiced or on a very small scale, in proportion to its importance, by

most persons, myself not excepted—its great value not being properly appreciated. The two past years have not been surpassed under my knowledge for the extreme scarcity by droughts. Yet under such extremes, I gathered from about three eighths of an acre of land at the time of digging and houseing potatoes, about sixty bushels each year, which were worth as many dollars equal to one hundred and sixty dollars per acre. It is astonishing that it should take us so long to learn when our opportunities are so great, yet it has been so. An aged gentleman informed me a few weeks since that he had gathered about three hundred bushels from one acre.

Respectfully yours,
Silverton, S. C. June, 1852.

B.

Agriculture.

MESSRS. EDITORS:—I have been taking and reading your paper, with varied interest, for some time, and profess myself benefitted by the same, in noticing the plans and experiments of others engaged in similar pursuits with myself, especially by those portions of agricultural chemistry, which illustrate philosophically the laws of nature acting upon soil, the atmosphere, light, and the plants in their growth and maturity.—Here is surely a wide range presented for agricultural thought and investigation. And whilst all the communications possess something of interest, yet it is not to be expected, that the interest of *all* would be equal to *all*.

Diversity must necessarily be the ruling characteristic of all papers—much more so of one of an agricultural character. We are aware that there are opponents to, and depreciators of, agricultural productions, or “book-farming,” as some choose to call it, as well as extravagant and servile followers of such regulators of planting and farming pursuits. Both parties I regard as occupying extreme positions, and consequently fall into occasional error and disappointment.—There exists a corrective for all this, by taking a middle course, in reading and using these productions, as a whole or in part, with a proper discrimination and judgment, guided by careful observation and experience. In them we are furnished with the plans of management, based upon assumed theoretical principles; the experiments of individuals, with such suggestions as their judgements dictate; and statistical tables of one and others, on all the different branches appertaining to general agriculture. As a matter of course, some of the operators live in the low-country, some in the middle and some in the up-country and near the mountains. Again, some in the East, in the North, in the West and in the South. Now upon the whole, *all these* must be regarded as only indicating general principles, the different branches of husbandry by their labors. Some of these approach a standard of perfection, and stand the test of time and change of circumstances. Others are found capable of further development. The North cannot develop a complete system for the South, nor the South for the North. Neither can the low-country for the mountain regions. And why not? Because, the diversity of soil, of

climate, of seasons, of the staple plants, &c., creates a local agriculture, and render a change necessary in the details of the modes of operation. Indeed, after the Agriculturist, be he a planter or farmer, or a mixer of operations, has obtained for himself a code of principles, from comparative husbandry and chemical analysis, he is only then well prepared to study his own locality, and adopt and perfect a system of operations, to suit his own premises and peculiar branches of agriculture. For the want of discrimination of this sort, men sometimes adopt every idea they see advanced, with too much confidence, and thus meet with results, in view of their credulity, which subjects them to ridicule. I see that some of you contributors prefer to deal in *generalities*, and others delight to descend to things in *particular*. This seems to be all right; they will prove beneficial to each other; and only keep a sufficient number on each side to balance the preponderance. Then with an occasional real "*Broomsedge*" bloom to sweep over and out, the *kinks* of hasty communications, we shall have fair sailings, and enjoy a true farmer's "*otium cum dignitate*."

JOHN C. HOPE.

Hope Station, S. C., June, 1852.

Old Rip is Wide Awake.

Yes, and it will be well if she don't arouse our own State from the after dinner *seista* in which she is now indulging. We transfer to our columns the following editorial remarks, from our excellent exchange, the "New Era," published at Goldsborough, N. C.—"a new comer," and one that promises fair to do good service in the cause of agriculture in the "Old North State," which we are pleased to see is buckling on her armor for the good work. But with all due respect and praise for the most commendable zeal and "good works" of our brother F. G. Ruffin, we can't agree with you, friend Era, in giving him *all* the credit of "having made Virginia what she is." And we know that his unassuming modesty will not allow him to claim it.—We are probably an older man and consequently recollect better than you the works, apart of which we have before us, of the veteran and lamented SKINNER, of GIDEON B. SMITH, and of our old friend EDMUND RUFFIN. It was they that set the ball in motion, and with the assistance of many noble souls whose names will be found in the pages of the old American Farmer, and Farmers' Register—such as John Taylor, James Garnett, &c., &c., it was kept in motion till their worthy successor has placed *his* shoulder to the wheel, which he is rolling bravely on, and may his lions be strengthened with the "one thing needful," that will enable him to roll it on to the acme of agricultural fame and greatness. And may our friend of the New Era, do as much for Old Rip, as will entitle him to the same meed of praise he is creditably bestowing on the present worthy editor of the American Farmer:

"The work goes bravely on. The farmers of our country are beginning to awake from their dreamy slumbers, so long indulged in, and are already exclaim-

ing, "I fear I am not in my perfect mind." Their past course fraught with error and loss, is arising before them like a loathsome spectre, and they evince a desire to flee its presence and enlist in that army that is fighting against ignorance, fraud, and vice, and thus to partake in the general reformation and progress of the age. From the distant hills of New England, experience has raised her voice and bids them—onward. On the mountain tops of Massachusetts, Agriculture winds her horn and the sweet cheering notes, borne onward by the gladdened, gladdening winds, are echoed from the tallest summits of our own Blue Ridge, and wafted through our vales till, mingling with the din of ocean's angry roar, they render it harmonious, as it swells the song of prosperity and triumph.

In North Carolina, the keen ear of Edgecombe was the first to catch the sound, and her intelligent sons were the first among us to buckle on their armor. In comparison with other parts of the State, her sons are to be regarded as veterans in the field, and the future historian will so proclaim it. But Edgecombe is now no longer alone in this great work. Many other counties have formed Agricultural Societies, and still more are taking steps to follow their example. Agricultural information is eagerly sought after by many, and many more will soon learn its importance. He who causes two ears of corn to grow now, where only one grew formerly, will soon be regarded as the greatest public benefactor, and is destined to take rank among warriors, statesmen, poets, and painters, formerly regarded as the peculiar prototypes of Fame, and alone entitled to honors and distinctions. F. G. Ruffin, of Virginia, is already receiving the rewards of his labors for his native State, in the daily tributes paid him by the press of the country there and elsewhere. He has made Virginia what she is, and she is, in an agricultural point of view, one of the richest States of the Union, in Agricultural products. In a request for a copy of an address delivered by him before the Agricultural convention, lately held in Richmond, the committee truly say—"We may rest contented with the *laurels* our ancestors have won; but we cannot feed our children upon the *bread* they made." We commend the beautiful sentiment to all our readers, and hope they will treasure it up, as an incentive to strive for agricultural honors. If there are distinctions in professions, they are

certainly to be made in favor of that of agriculture, and to stand at the head of one's profession, constitutes the highest honor, the purest earthly enjoyment, and entitles to the widest fame. Till the present day, no niche, in the temple of Fame has been set apart for the Agriculturist. He has been generally regarded as too humble to merit distinction, and too stupid to seek it through the means of his *lowly* profession. But as truth emerges from error, and acquires fresh vigor and beauty as it advances to the light, so the farmer is emerging from his long unmerited obscurity, and is slowly but surely reaching his true position among men—a position that will entitle him to sit, not only side by side with warriors and statesmen, but above them all.

To ensure this, to take rank among men in any profession, *education* is necessary. Let our children, then, be educated *thoroughly* and *liberally*, and the future farmers of our country will be, as they ought to be, our future rulers, our future statesmen, and our future teachers."

Sap-Suckers.

MESSRS. EDITORS:—Some men who assume to be wise, have asserted that "sap-suckers" are not "sap-suckers," and that their attacks on apple-trees is evidence that the tree is diseased; and they peck the small holes in it hunting worms and insects for food. To this opinion I gave adhesion, not knowing better until the two last winters. My trees were healthy, so far as I could see, and the birds made holes in the smoothest and healthiest looking bark. I determined to watch them and ascertain, if I could, why this was so. In a few mornings I had the gratification of having the thing made plain. The bird makes the hole in the bark down to the wood, and then sits still and watches until the sap makes its appearance. The sap is then drunk and a new hole made; and thus the same process is continued and repeated some times for hours, with this variation only, that the bird occasionally gives the holes a second examination, to see if the sap has accumulated the second time. These depredations on the apple and pear tree is made in cold weather, particularly of cold frosty mornings in the latter part of winter. I was reminded of the maple sugar making of the North and West.—The sap of the apple tree seems to be more abundant, or disposed to run in precisely the same kind of weather that the sap of the maple does, and the bird instinctively understands, as well as man,

when to seek it with the greatest certainty of success.

The fact, that many of the woodpecker tribe do peck the dead timber in search of worms, has I suppose given rise to the mistake, that "sap-suckers" are working with the same view.

Respectfully, AGRICOLA.

Labor.

In those States and countries where negro slavery does not exist, the white man performs the same labor that the black does with us; and as those who hire themselves to work have no claim upon their employers except for their wages, there is consequently no sympathy between the two classes. The competition which exists brings wages down to the lowest possible sum.

This state of things which obtains where there is no slave labor, produces an amount of suffering and wretchedness of which we, who live in slave countries, can form no idea, unless we have travelled in those countries; for, among us, things are so different that we cannot imagine what privations and distress abound among those who occupy the place of our slaves. In the non-slaveholding States there is no feeling of mutual dependence and interest, as there is between master and slave. The selfishness of the employer leads him to procure the services of the other for the smallest sum he can, and as a consequence, the laborer is seldom able to do more than supply his daily wants, often not even that, so that in case of sickness there is great want, privation, and suffering.

In the slave states the case is vastly different; the negro is well fed and clothed, whether his master prospers or not, food and raiment, and medical attendance are furnished him; his task is moderate; his family do not depend upon him, but on his master for support. In old age the negro is provided for by his owner, and not like the white man, cast out upon the cold charity of the world.

How infinitely more comfortable is the condition of our slaves, to that of the white man, that fill his place in non-slaveholding communities. There the condition of things is pressing him downward year by year, to a worse state—with us the state of the slave is improving. An increase of means to the master, brings an increase of comfort to the slave. Not so with white man—if his employer abounds in wealth, it brings no corresponding means to supply his wants; his scanty hire he still gets and that is all—

and from year to year, as competition in labor increases that even diminishes.—The condition of the white laborer has been steadily getting worse since the *feudal* times, in considering this subject, Carlyle says, that there is no remedy, except by a return to slavery of some kind.—*Camden Journal*.

Murrain in Cattle.

Distemper in cattle seems to be caused in this section by undue exposure to the hot sun. A bare pasture, with but little shade, is therefore unfavorable. The cattle are thus compelled to feed in the heat of the day; and this evil is sometimes increased by their passing through a long lane to the cow-pen before sunset, and returning after sunrise in the morning. It is found that when an animal is first attacked, he separates himself from the herd, seeks some retired spot, hangs his head, and ceases to ruminate. If he can be discovered in four or five hours after this symptom appears, the disease may be arrested by drenching with a decoction of poke root. The urine is now reddish; a few hours later it is bloody, and at this stage of the disease no cure is known. He expires in less than twenty four hours.

When cattle are furnished with an unlimited supply of clean, strong ashes and salt, they usually escape. Of this mixture, say one of salt to twenty of ashes. I have known my cattle require a pint a day on an average, to each animal for weeks in succession. Air-slaked lime and salt have also been used as a preventive; and a distinguished agriculturist in this state, considers this as infallible.—By mixing a little meal with it, it is made more palatable.

The disease usually breaks out here in June, where precautionary measures have been imperfectly attended to, and no subsequent care or attention will arrest it. I have lost several by it the present year. Unless the ashes are clean, cattle will not touch them; and the owner may be deceived in supposing they have a plentiful supply, when, in fact, they are suffering.

The plan pursued in preparing the drench, is to put a double handful of the poke root in a half gallon of water, and boil down to a quart. Give it milk-warm and repeat the dose in eight or ten hours.—*Cor. Southern Cultivator*.

Bettisford, N. C. October, 1851.

Our doctrine is—feed the earth and it will feed and cloth you.—*Ahem*.

Barn Yards.

There is one consideration which every farmer who keeps stock, and who aims at the continual improvement of his lands by the application of manures of domestic manufacture, should by no means overlook; and that is, in order to have good manure, he must in the first place provide a suitable yard. The many inconveniences which were formerly thought to be inseparable from the yards so constructed and situated as to retain the liquids, were doubtless strongly operative in suggesting the practice of locating them so as to admit of its readily running off; an oversight, by the way, for which no circumstances of abstract convenience can adequately atone. In Germany, Holland and Scotland, the yards are almost uniformly so constructed as to retain all the liquid substances among the manure. A coneave surface, having a central depression of some two or three feet, according to the area or superficial extent of the enclosure, is selected, and the inequalities having been first carefully leveled, the entire surface is covered with clay, finely pulverised, and tempered to the consistency of mortar, so as to be evenly spread. In this mass are then placed small stones, of a uniform size, and in such a way that the entire work constitutes a sort of pavement, similar, in many respects, to the pavement of our streets, and through which none of the liquid particles of the manure can possibly escape to the soil below, while the coneavity of the general surface, operates also as an equally efficient protection against the wastage of the saline and other salts against the washings of the rains. These yards are frequently surrounded by sheds, or temporary out buildings, to which the inmates are permitted to retire in cold, or damp weather. The introduction of such improvements here, would constitute the dawn of a new and most important era, and would doubtless soon be of incalculable interest to our agriculture.—Here in America, where we have a sufficiency of material ready provided to our wants, and where every farmer has both time and ingenuity for the undertaking, the construction of yards upon this excellent system, would necessarily involve but slight expense. We have known some farmers who have endeavored to prevent the wastage of their liquid manure by putting down an artificial bottom of clay. This is usually accomplished by spreading over the bottom a thin

stratum, and giving it the requisite degree of compactness by pounding or rolling. The bottom is never removed, and by making occasional additions, it may be rendered a very economical and efficient agent in saving a most valuable article of manure. When the rich liquids of a manure yard are suffered to filtrate, and thus pass into the depths of the earth; the value of the article that remains is greatly diminished without any gain.—But where it is retained and absorbed by some substance, it becomes a most valuable accessory, and by some writers on agriculture, is considered equal to the solid portions of the manure. That it is very rich in fertilizing particles is indeed obvious from the astonishing effects it produces on vegetation—especially on vines, small plants, &c., when used in irrigation, and upon grass lands.—*Ex.*

A REMEDY FOR CHOLERA.—The St. Louis Union says, that on a recent trip of the Bunker Hill, one of the deck passengers was suddenly seized with a violent attack of cholera. A physician from Memphis, who was on board, prescribed to the suffering man, pulverised chalk, ground ginger and capsicum, and soon had the satisfaction of seeing him become convalescent.

Enquiries.

MARLBORO' S. C., }
June 14, 1852. }

MESSRS. EDITORS:—Will yourselves or some correspondent be kind enough to answer the following question?

Before, however, putting the question, I should properly state the case. My entire crop embraces four hundred acres of land. I usually cultivate one hundred and fifty acres in cotton, one hundred and forty in corn, and the balance in small grain of different kinds, and peas. I plant my river low grounds in corn and oats, and my uplands in cotton. My uplands are divided into two fields, each containing one hundred and fifty acres. These are equally convenient to manuring purposes from lots.

Now the question is this. Is it more to my advantage to manure one field and cultivate the same every year of my life, or to rotate by planting the same field for three successive years and then suffer it to lie out and to cultivate the other field for the same length of time? I am able to manure about one-third of my crop with stable and lot manure, and apply cotton seed at the rate of twenty-five

bushels per acre, to the remaining two-thirds. By answering the above in your approaching July No., you will greatly oblige
Yours very respectfully,

PEE DEE.

Will some of our friends who are posted up attend to the above enquiries? If others do not we will at our earliest convenience.—Eds.

Importance of Personal Attentions.

We take the following excellent remarks on the importance of personal attentions, from the Soil of the South. Hit 'em again, Mr. Straightedge, for you have struck perhaps as many at one blow as Sampson slew of the Philistines, but with a very different weapon—the operation of which is so much more mild as to require repeated applications, however, to effect a cure.—Eds. F. & P.

MR. EDITOR.—It was one of the wise sayings of that great philosopher, Doctor Franklin, "If you want any thing done well go—if not, send." There is in this, as well as in most of his sayings, a great practical truth, and in its observance much vexation and disappointment would be avoided, and much real gain be realized. In no business is it more applicable than that of planting; and in none are its consequences more disastrous. Ours is a business which has its times and its seasons, in which we must act promptly; for the opportunity once slighted never returns. How important that it be well improved! The man of ease says to his negro, "go plant the crop," trusting too often to his discretion or fidelity. The season for planting passes—the wheat, or the oats, come up too thin or too thick—or either, by turns—here too much have been sowed, there too little.* The corn, somehow, doesn't come—badly dropped—ten grains in one hill, none in the next—one hand covering too deep, another scarcely hiding it from the first bird that passes that way in search of a breakfast. The cotton seed dropped in bunches—here a handful, there a skip. The happy negro cares not—it is all the same to him whether it is a good stand or a bad one. He, perhaps is looking out for the approach of the overseer, or is watching the flight of birds, or perhaps still more happy in the opportunity of making up for loss of sleep the night before—nodding—when his attentions are all needed in the execution of his work. 'Tis badly done, but

* Our light crop of wheat the present season, owing in a great measure to the carelessness of negroes in putting in the seed during our absence from home, brings sensibly and feelingly to our mind the truth of these remarks.—Eds. F. & P.

this fatal discovery is never revealed until the sad story of failure in the coming up is manifested. It is then too late—all the abuse and bluster common to such occasions cannot repair the injury. Days may be appropriated to re-planting, which are needed about other work—still the evil exists, and the fate of the crop is fixed, and the loss of the year is the consequence—all for sending instead going. The fences are to be repaired—the order is given—the negro goes to his work, and the overseer remains to take his ease, or goes to seek his pleasure in employments more congenial to his taste. The work is done, and in mid-season, when the crop is growing, and the work is pressing, some unmannerly bull, or long nosed sow, takes a fancy that better fare might be found inside than outside the inclosure, and accordingly enters, bidding all their friends and acquaintances welcome. Then comes a fuss—negroes and dogs are paraded, the intruders are ejected, but not until they have got a taste not soon to be forgotten. This storm works off into curses upon the negro, for his unfaithfulness, but never brings back the damage done to the crop. The cotton is now up, and needs thinning to a stand. The negroes are sent, but the overseer stays. We need hardly sketch the picture; you have seen it. The poor cut worms and the lice have many sins laid at their door, for which they will never have to account. The stand is spoiled, and the crop is lost, all for the want of going, instead of sending, to have so delicate a task performed. This sort of management is fun to the grass, also—only having to lower its head a little, and submit to a little dusting, and as soon as your back is turned, to come up with greater boldness than ever again. The difference between the labor of good work, and that which is slighted, is very little, but the results are vastly different—all for the want of the master's eye. The mules have plowed hard all day, when they are returned to their stable for rest and food. The overseer goes to his supper, and soon to bed, while he sends the plowman to do the business of feeding and watering. Corn is thrown in profusion to-night, and the poor animal, perhaps on short allowance the night before, eats a perfect gorge, and in his fullness and heat, from the double portion of corn in his stomach, "thirsts for the cooling water brook," where he completes the work of death. Colic comes on, and the mule is lost, and the

master and all wonder what could have produced it. All for sending and not going. The cattle go astray, the hogs are lost, the meat-house is empty, the provisions wasted, and a thousand nameless ills ensue, just because Sambo or Tom was sent. I am aware that I am perhaps reading a lecture to those who do not need it. For I would fain hope that I have not hit any of the readers of this journal. If I should have done so, however, I have no apology to offer, but would admonish all such to stand out of the way for the future. I intend not to offend any of that very worthy and valuable class of men who are engaged in the laudable business of overseeing. There are among them as good and faithful men as belong to the land.—I would do *these* all honor, and propose, by these castigations, to elevate their calling, by exposing the pretender, and helping, by the example of the faithful, to improve, or drive from their ranks, all the drones who live only to pocket their year's salary, and leave the interests entrusted to their care, to take care of themselves. Do not forget the motto, "If you want anything well done, go—if not, send."

STRAIGHTEDGE.

South Carolina Institute.

The following circular from the Secretary of the S. C. Institute, was noticed in our last (July) number, page 111. We now take pleasure in laying it before our readers, and to invite them generally not only to become members of the Institute, but to prepare to exhibit their "Agricultural articles, products, stock, &c." Let us not become the "Rip Van Winkle" of the South, but let us be up and doing—let us prove to our sister States, that "some things *can* be done as well as others." We have just returned from our great Rail Road Convention, at Anderson Court-house, and from what we there saw and heard, believe our State is fully alive to the great importance of internal improvements. Let us encourage and cherish that spirit which is lighting up our borders. Let us not only encourage the making of rail-roads to carry our products to market, but let us encourage the organization of societies, the objects of which shall be to improve agriculture and increase the agricultural resources of the State, so that our rail-roads when built, may have yearly increased transports, not only of our produce, to market, but of stock, and articles of mechanical skill and ingenuity for exhibition at our great Southern Fairs, which we may hope to see yearly held at this, to be, great emporium of our State and of the South.

We shall be pleased to receive the names and contributions of all persons of our neighborhood who may desire to become members of the Institute, that we may forward them to the Secretary,

"CHARLESTON, S. C. MAY 20, 1852
To Maj. Geo. Seaborn—

SIR:—At a meeting of the directors of the South-Carolina Institute, held in November, 1851, it was

"Resolved, That the Secretary be instructed to open a correspondence with the President of the State Agricultural Society, and with the several District Societies, upon the subject of obtaining co-operation of these Societies in carrying out the objects of the Institute. And also, as to the feasibility of having a general Fair in November, 1852, whereat Agricultural Articles and Products, Stocks, &c., may be exhibited. The Fair to be held at Charleston, contemporaneously with the Annual Fair of the Institute, and as an ally thereto."

In compliance with this resolution, an effort has been made to correspond with the State Agricultural Society, and with the several District Societies. The former did not meet last winter, and, it is generally believed, is virtually disbanded, and I have been unable to procure the addresses of the latter; no communication has, therefore, been opened.

The Board, in view of this inability to open a correspondence, have instructed me to communicate with some of the leading gentlemen in each District in the State, and endeavor to enlist their interest in carrying out this cause—to solicit their aid in forwarding the great object for which the Institute has been established, the fostering of southern industry, the developing of southern resources. To you, Sir, as a gentleman of eminence in your district, this communication is addressed, with the earnest request that you will aid us with your efforts, and give such publicity to this communication, by conversing with your neighbors upon the subject, and also, by having the same published in your papers, as you may deem most apt to forward our object.

As is expressed in the above resolution, the Board desire to have an exhibition, annually, of all those things in which the Planter is interested. The staples of the State, grain, &c., stock horses, hogs, every thing, we wish to have exhibited in connection with the Fair, at which is displayed mechanical industry and ingenuity of southern citizens. And we propose distributing to such articles, appropriate premiums, to be awarded by judges chosen from among the agriculturists themselves. Surely this is an object worthy of the attention of yourself and your people. In Georgia, a plan similar to this has been found of incalculable ben-

efit, and annually Fairs are held, at which thousands assemble, and hundreds compete for the prizes. In October next, such a Fair will be held at Macon, and so sensible are the people of the state of its advantage, that the General Assembly has appropriated the sum of twenty-five hundred dollars to be expended in the award of premiums alone.

The Board will also feel greatly obliged if you will endeavor to induce your neighbors to become members of the Institute. The subscription is but three dollars for the first, and two dollars for every other year, and the amount is placed thus low, that the whole state may become interested in supporting this effort to develop its resources.

Will you be kind enough to inform me whether this endeavor meets your approbation, and if so, what success attends your efforts.

I am, Sir, very respectfully,

Your obedient servant,

WILMOT G. DESAUSSEURE.

Secretary.

P. S.—One can become a Life Member by paying \$15, and no arrears are then due.

Sheep Walks---Strychnine.

On reading the following article, taken from the Greenville Mountaineer, we shrewdly suspect this modern protector of sheep, has had something to do in and about our village, for we are informed we have had several "cholera cases" among the dogs recently. It is said they "run mad" and died in a very few hours. And we recollect seeing a few straggling sheep about the village just before the occurrence of the melancholy events referred to. Now who knows but the owner of these sheep may have been advised by Dr. "Agricola" how to protect them. Better "keep dark" Doctor—the dogs have a great many friends.

MESSRS. EDITORS:—Having derived a considerable benefit from the distribution of small portions of strychnine in different parts of my sheep pasture, it is but common courtesy that I give the discovery publicity for the benefit of other sheep raisers. I put a grain or so in a place in various parts of my pasture proportioned to the quantity of land enclosed. Since I commenced to use it in this way, my sheep feed quietly—have become quite tame, and some of them will eat salt in my hand. I can now walk or ride amongst them when they are feeding, whereas they formerly would break and run at every little noise, or the approach of every person and thing. They fatten much more readily in the same pasture, and the wool grows faster, and the lambs increase in size much more rapidly.

Now, as to the *modus operandi*, I shall not presume to inquire. Whether it improves the growth or nutritious qualities of the grass—ex-

hales an alluvia that invigorates the vital energies of the sheep through their breathing apparatus, or in some way accomplishes the above very desirable results, I leave for the learned and wise to determine.

In this world of complex agencies and influences, most goods have their attendant evils; so in this instance. There is one inconvenience attending my discovery. My neighbors' dogs, as well as my own, will sometimes destroy the strychnine, and put me to the expense and trouble of arranging a new supply. The neighbors also complain that the strychnine does not improve the health and vigor of their dogs; though this I look upon as a small matter, for all that is necessary, is to keep the dogs out of my sheep walk. My neighbors have a perfect right to keep as many dogs as they please, and I have no right to complain; but they have no right to keep dogs on my premises. If they will just keep their dog at home, they will not be injured by the strychnine. If not, I shall have to lose my strychnine, and they will lose their dogs. The complaint will be reciprocal and therefore neither will have much to gain or lose above the other.

I understand that strychnine has recently been used in some of the villages and small towns, in pretty much the same way, for the benefit of gardens and yards and with decided effect and advantage.

When will wonders cease in this age of discovery and 'progress?'

AGRICOLA.

Cotton Blooms.

We received last week, a cotton bloom taken from the farm of Maj. A. P. MARTIN, on the 20th ult., and one from that of Maj. J. D. WRIGHT, on the 22nd.—These are the earliest blooms that we have heard of in this part of the country, and should have been acknowledged in our last issue, but were accidentally omitted.

While upon this subject, we will take occasion to suggest to our planting friends, the importance of sending with their blooms, a statement of the general condition of their own, and the crops in the neighborhood. Unless this is done, serious injury may sometimes result to the planting interest.

Speculators abroad watch with much anxiety the first appearance of cotton and of frosts. We have been informed that they have agents in this country to notify them of these and other important facts in reference to this important staple, and that they note them down in a book regularly kept for the purpose, and rely upon it as the best data from which to make an estimate of the future crop.—Now, suppose that blossoms should be announced in the public prints some ten or twelve days before the crop is so far

advanced, an over estimate would be placed upon it and a consequent decrease in the price would be the necessary result. So soon as a bloom is announced nothing more is said upon the subject, and that one bloom may be the only one seen for weeks to come, may be the cause of the loss of thousands of dollars in the value of the crop.

We have referred to the files of the *Herald* of last year, and we find the announcement of a bloom on the 17th of June, and the Editor speaks of having heard of them as early as the 7th. The present crop, therefore, is later than that of last year, as observation will prove, and from this cause, and from the quantity of rain which we have recently had, if the fall is not very favorable, will not be too abundant. The weed may be as large as common, but its exuberant growth will be very unfavorable to a prolific yield.

The above article is taken from the *Laurensville Herald* of the 2d July. We published an article last fall in the *Farmer and Planter*, disapproving of the mania with which some of our planters are affected of heralding to the world "the first bale of cotton." A man may gain the honor by causing his negroes to bite open immature cotton bolls to help make out his first bale—but it is not unfrequently dearly bought honor, not only to himself but to the whole cotton planting interest. With this impression, we concur with our friends of the *Herald* in their suggestions as to "the importance of sending with their blooms," and we will add with their first bales, "a statement of the general condition of their own, and the crops of the neighborhood," if they must make a report of them, lest injury may result.

In making the above remarks, however, we would by no means be understood as condemning that landable and praiseworthy ambition which tends to stimulate the farmer or planter to excel his neighbor in the time, quality, and quantity of the products of his labor. But especially in the article of cotton, we do think it most prudent not to show our hand, for there is evidently a great deal of chicanery practiced by cotton buyers, in obtaining the article from producers too often at less than its real value, and at less than remunerating prices.

EDS. F. & P.

Tempering, Hardening and Softening Metals.

USED IN THE MECHANICAL ARTS.

(Continued from page 105.)

Thirdly, the heat for tempering or letting down. Between the extreme conditions of hard and soft steel, there are many intermediate grades, the common index for which is the oxidation of the

brightened surface, and it is quite sufficient for practice. These tints, and their respective approximate temperatures, are thus tabulated:

1. Very pale straw yellow,	450°	} Tools for metal
2. Shade of darker yellow	440	
3. Darker straw yellow,	470	} Do. for wood, ser, w taps, &c
4. Still darker yellow,	490	
5. A brown yellow,	500	} Hatchets chipping chisels, & other percussive tools, and saws, &c.
6. A yellow, tinged slightly with purple,	520	
7. Light purple,	530	
8. Dark purple,	550	} Springs.
9. Dark blue,	570	
10. Paler blue,	590	} Too soft for the above purposes.
11. Still paler blue,	610	
12. Still do. tinged green.	630	

The first tint arrives at about 430° F. but it is only seen by comparison with a piece of steel not heated. The tempering colors differ slightly with the various qualities of steel.

The knife-edges for Captain Kater's experimental pendulum, were very carefully hardened and tempered in a bath heated to 430°. Being then found too soft, they were re-hardened, and tempered, at only the heat of boiling water, after which they were considered admirably suited to their purpose.

The heat for tempering being moderate, it is often supplied by the part of the tool not requiring to be hardened, and which is not therefore cooled in the water. The workmen first hastily tries with a file whether the work is hard; he then partially brightens it at a few parts with a piece of grindstone or an emery stick, that he may be enabled to watch for the required color—which attained, the work is usually cooled in any convenient manner, lest the body of the tool should continue to supply heat. But when, on the contrary, the color does not otherwise appear, partial recurrence is had to the mode in which the work was heated, as the flame of the candle, or the surface of the clear fire applied, if possible, a little below the part where the color is to be observed, that it may not be soiled by the smoke.

A very convenient and general manner of tempering small objects, is to heat to redness a few inches of the end of a flat bar of iron about two feet long. It is laid across the anvil, or fixed by its cold extremity in the vice; and the work is placed on that part of its surface which is found by trial to be of the suitable temperature, by gradually sliding the work towards the heated extremity. In this manner many tools may be tempered at once, those at the hot part being pushed off into a vessel of hot water or oil, as

they severally show the required color; but it requires dexterity and quickness in thus managing many pieces.

Vessels containing oil or fusible alloys carefully heated to the required temperature, have also been used; and I shall have to describe a method called "*blazing off*," resorted to for many articles, such as springs and saws, by heating them over the naked fire until the oil, wax, or the composition in which they have been hardened, ignites. This can only occur when they respectively reach their boiling temperatures, and are evaporated in the gaseous form.

(To be Continued.)

Beat it who can! Great Yield of Cotton and Wheat.

It will be recollected by most of our readers that we reported in our last (2nd) vol. p. 99, of the Farmer and Planter, the unprecedented production on one acre of land in the upper districts of our State, of 2528 pounds of cotton, made on the plantation of our young friend, S. E. MAXWELL, 15 miles west of Pendleton, in Pickens district. The mode of preparation and cultivation was also given of the crop grown in 1850.

Preparatory to a second crop to be grown in 1851, the stalks of the preceeding crop were pulled, piled and burnt on the land, which was afterwards sub-soiled to the depth of 14 inches across the old beds, so as not to remove the manure deposited for the previous crop. The beds were next opened with a narrow shovel plow, and the furrows half filled with stable manure, which was ridged on and bedded to--- Time not noticed.

The seed were planted on the 10th of April and covered with a board with a notch in it and made fast to the foot of the plow. No extra work was given, in consequence of a very bad stand. So bad, indeed, that the whole would have been plowed up, but for the fact that the seed---the Banana---cost ten dollars a bushel--- Owing to the reduced number of stalks and the unusually dry and unfavorable crop year as 1851 was, the yield was only 1496 pounds. The cotton was got out as early as possible, with the intention of sowing the lot in wheat, which was done on the tenth of December, the land having been previously cleared of stalks and sub-soiled to the depth of 12 to 14 inches. The seed wheat, one bushel and three pecks of the Alabama variety, was steeped 12 hours in a strong solution of sulphate of copper, (blue stone,) in the proportion of one pound to five bushels of wheat, with just water enough to cover the wheat; then rolled in lime, sown and brushed in. The crop was cut early in June, and threshed and cleaned thoroughly by passing thrice through the fan and screen on the 18th---gunned two days, and measured. The quantity was 30 bushels and 1 peck!

This extraordinary product of 4024 pounds of cotton with unfavorable attendant circum-

stances, and 304 bushels of wheat, from one acre of land, in two years and a half, speaks trumpet tongued in all successful operations on the farm, of not only the indispensable necessity of a proper preparation of the land by high manuring and thorough sub-soiling, but also of the great advantage of having a man who is master of his profession, and who is capable and willing to carry out the plans and designs of his employer, as has Mr. M. in the person of Mr. McCrary, his manager, so as to realize his most sanguine anticipations.

Mr. MAXWELL is a young farmer and planter, but is already a model for many older ones of our districts. He has carried out a system of hill-side or grade ditching co-extensive with his whole arable lands, and on the most correct and successful principles. And as to systematic neatness and order in all the operations on his farm---in his fencing, with superior gates into every field---his buildings of every description---his machinery and agricultural implements and tools for all work---in his excellent stock of every kind, their condition, &c., &c., he may challenge a rival in the up-country.

Beware of unnecessary expenses; suffer nothing valuable to run to waste.--- "A small leak will sink a large ship."--- *Maine Farmer.*

The Curculio---A Discovery.

Much has been written on the Curculio---many enquiries have been made as to its habits, destruction, &c. We have carefully read every article seen for years back in our agricultural papers, and in a large number of exchanges recently, for the remedy, but have found nothing that could be relied on.

Having some fine plum trees, the fruit a very large reddish-purple variety, that have been bearing some 8 or 10 years, and never maturing a dozen plums a year; we have felt much solicitude and much anxiety to discover a remedy. We have tried many that have been recommended without success. Knowing that trees standing in a hard trodden yard were more apt to mature fruit than others differently situated, we resolved last spring to make an experiment. We therefore, before the trees were in bloom, removed the soil, which was thickly set in Bermuda grass, from around each tree to the distance of 5 or 6 feet, and depth of 2 to 3 inches---then built a chicken coop around each tree, and requested our better-half to have her chickens &c., fed nowhere else but in the coops, which has been done; consequently, of chickens, ducks, turkeys, &c., one brood or another will be found under the trees, waiting for their oft repeated meals, throughout the day, and ready to pick up every curculio that dare show his head above ground. Now mark the result: our trees are breaking with the finest fruit, just maturing (July 10), we have ever seen. Comment is unnecessary---each reader can make his own deductions. If on further trial the course pursued this year shall prove an effectual preventive, even when applied to a few trees, we shall feel gratified at having made the discovery.

You may patent us for this, Mr. Eubanks---for if you do not some of our friends who have nothing but original matter to their papers, will appropriate it---as they have our anti-meat-skipper remedy---somewhat in the following manner:

To PREVENT CURCULIO, &c---Build coops and feed poultry under your trees.

Editors' Table.

The Southern Central Agricultural Association

Will hold its seventh Annual Fair at the city of Macon, Ga., on the 19th, 20th, 21st, 22d, and 23d of October next. "It will be observed," says the Soil of the South, "the premiums offered for the approaching Fair, are on a scale of liberality and magnificence never before equaled at the South. The citizens of Macon will complete and perfect the arrangements commenced last fall, to make the Fair Grounds and buildings the most commodious and attractive in the Union: and the Executive committee will spare nothing to make the Fair worthy of Georgia and the South."

This Fair will no doubt eclipse any thing of the kind that has ever taken place in the South. It is to be hoped that every farmer and planter that may have it in his power will attend, as all are invited. Such meetings will have the good and much to be desired effect of stimulating the citizens of other States to follow the example thus set them by our go-a-head sister, Georgia.

Ourselves.

We feel under obligations to our friends, the editors of most of the political papers with which we exchange, for their kind attention and their frequent favorable notices of the Farmer and Planter, with which the senior editor has, for the last six months, been struggling along without any assistance in the editorial department,---with about as scanty allowance from this source for his daily bread, as has many a negro experienced this year of unparalleled scarcity of provisions. Well, from present appearance of crops, they may console themselves with prospects of a "good time coming boys." Not so with us, for with all the drumming from our warm friends, and we have many, and favorable notices from the press, we have a strong premonition that our State will allow us to perish at this business. If, with all our exertions and sacrifices to start and keep up an agricultural paper in the State, the people are not disposed to sustain us, so be it. Other papers are springing up in all the Southern States, which liberal and enthusiastic gentlemen are making honorable propositions to sustain at all hazards, and they will be sustained.

Our eighth number, of volume III, is now out. We have only four numbers more to issue.--- We shall see in the mean time what our State will do, and act accordingly. But we have written much more than we had at first intended.--- Our object was only to make acknowledgments to our brethren of the press, who have so disinterestedly, and honorably to themselves, applau-

ded our humble pretensions, and advocated our claims to the support of the South, and especially of our own State. To many such we feel under lasting obligations; but to none more than to those of the "Laurensville Herald"—both its former and present polite and gentlemanly editors and proprietors, have stuck to us like brothers. We might have filled many columns of the Farmer and Planter with the favorable notices of our brethren of the press, both political and agricultural, but we have not chosen to do so for obvious reasons. In our paper they would only be seen by its own readers who are already its supporters. In theirs, such notices will reach many of the very persons we most desire them to reach, such as take no agricultural paper, and have not felt the want of one—or are too pharisaical or miserly to contribute to the support of one. We occasionally do, however, depart from this rule, and must beg the indulgence of our readers in doing so now, by publishing an article from the Laurensville Herald, which follows:

"FARMER AND PLANTER.—We regard it a duty that we owe to the agricultural interest of the country to call the attention of our farmers, occasionally, to this interesting and ably conducted Journal.

It cannot be denied, that while almost all the other industrial pursuits of life are making rapid strides towards perfection, that of agriculture alone lags behind. The farmer of to-day, with a few intelligent exceptions, is following in the track of his revolutionary ancestors. He checks his corn uphill and down, and has utter aversion to horizontal drains, and other plows than the shovel and seeder are his abomination. Like the Chinese, he builds a wall of ignorance around him, and regards the attempts of any one to enlighten him, as officious and intermeddling. Why is this? Simply because he "lives off the road, and don't take the papers!"

The general distribution of a journal like the Farmer and Planter, conducted by practical as well as scientific farmers, would excite a spirit of inquiry and a desire for information among our farmers, which would soon make a wonderful increase of our annual productions."

We take the liberty of publishing below a part of a private letter from our highly respected and excellent friend, J. H. B., of Malino, Miss. We are proud to believe we have many warm personal friends—would we were more worthy the good opinion of such men, as well as many devoted supporters of the cause we have been induced to embark in, and which we are laboring hard to sustain, even without remunerating compensation. Yet we much regret for the good cause that we have not a thousand more such as J. H. B. With such we should have no cause of complaint, nor would South Carolina lay herself liable, even to the suspicion by her sons, who, altho' they have left her borders, are yet devoted to her honor and interest, of having greatly abated in the spirit and energy of her citizens.

"GENTLEMEN:—You will please find

enclosed seven dollars to pay for the 3rd vol. Farmer and Planter for the annexed names * * * * *

I am persuaded that if the people of South Carolina, generally, felt as much interest as some of us do here, in the Farmer and Planter, it would be most amply sustained. The influence which your paper has exerted in this vicinity, is now quite apparent. It has been the means of calling the attention of farmers to the importance of *sub-soiling* and *hill-side drains*. Some who do not take the paper, are following the example of those of us who do; and thus you perceive that the benefits of your labor are diffused far beyond the mere limits of your subscription list. The happy effects produced by the Farmer and Planter, will be seen and felt in any community in which it is circulated. I do hope that the citizens of South Carolina will not suffer the disgrace of permitting the only agricultural paper in the state to go down for the want of patronage. If they do, with all my partiality and devotion to the state of my nativity, I shall be forced to conclude that the spirit and energy of her citizens, if not departed, have at least greatly abated. * * *

Wishing you much success and great personal happiness, I remain as ever, your friend, J. H. B.

"Mr. STOKES is about making arrangements with Major SEABORN, of Pendleton, to have the *Farmer and Planter* transferred to Laurens, and there published in connection with the *Herald*, under the editorship of Mr. DAVIS, of that District."

The above item of news we get from the *Southern Patriot*. Well, Major, you have found out more about our business than we happen to know ourselves. It will, however, depend altogether upon the friends of the *Farmer and Planter*, whether it shall maintain a separate existence, or be merged into a political paper. If they determine on the latter, we know of no man to whom we would sooner dispose of the concern, than our friend STOKES, and this much we stated to him in a correspondence on the subject sometime in November last.

Letters Received since 1st June, up to July ---

B. G., *Britton's Neck, S. C.*—Much obliged for your good opinion—would be pleased to continue the Farmer and Planter, and will do it, if the people will sustain us, otherwise it can't be expected by our friends.

H. R., *St. Matthews S. C.*—Glad to hear from you again. There are to be found in our State hundreds of men who take *too few*, where you will find one who takes *too many* agricultural papers, whether his farm be large or small. The back numbers would have been sent earlier but that we were waiting to hear from you.

P. M., *Society Hill, S. C.*—Wrote you on receipt of yours.

—*Barnwell, S. C.*—One of our subscribers at

this place has enclosed a dollar (letter dated June 5th) to pay his subscription for volume 3, but has not given us his name—will please write again.

J. B., *Silverton, S. C.*—Accept our thanks for your communication on culture of sweet potatoes, which appears in this number. Shall be pleased if our friends generally will give us their experience in the successful culture of the whole or any part of their crop.

Col. W. W., *Fingerville, S. C.*—You have paid up to, and including No 6, vol. 3. Your request attended to.

P. M., *Glenn's Springs, S. C.*—Thanks for new subscribers. Papers sent according to directions.

P. M., *Marengo, S. C.*—All right—wish we had more at your office of the same sort.

P. M., *West Point, Ga.*—The transfer has already been made, and from neglect to strike out T. J. W.'s name at your office, the paper has been sent to him at both offices.

P. M., *Lula, Ala.*—Paper forwarded as requested.

E. T. S., *Hurlesville, S. C.*—Our respects are due you, and the respectable club we have had the pleasure of receiving from you. Papers sent according to directions.

R. P. L., *Richmond, Ala.*—The money is good—wish you could send of the same sort for 100 subscribers in Dallas: we would send you \$20 back with our politest bow for your good will.

J. C. H., *Hope Station, S. C.*—The payment is right we with pleasure give your communication a place in our columns, and welcome you as a new contributor.

L. L. F., *Sumterville S. C.*—Nothing uncommon to hear our paper has not come regularly to hand. We have sent the missing numbers and written you on the receipt of yours.

R. M. S., *Laurensville S. C.*—Since our return from Greenville, where we had the pleasure of seeing you, your letter has been received, and contents credited to Thomas B. We have not the name of J. T. B. on our Laurens list.

Dr. W. R. S., *Union C, H. S. C.*—Your letter from Shreveport, La., has been received and transfer made. Glad you have come back to old South Carolina. Better country than Texas or even California.

R. F., *Huntsville, Ala.*—The back numbers of the present volume have been sent you. Your other instructions will be attended to in due time.

Hon. J. H. B., *Malino, Miss.*—Many thanks friend B. for your unceasing good will. The back numbers have been sent to your respectable list of new subscribers, and your request attended to. See remarks in another column.

P. M., *Cold Spring, S. C.*—D. R. owes us, in addition to the amount enclosed, sixty cents.

Dr. C. D. B., *Unionville, S. C.*—Credit entered.

T. K., *Hamburg, S. C.*—Rather a flimsy excuse for not taking your papers out of the office.

P. M., *Beth Eden, S. C.*—W. W. has not written us: we have made the transfer, however.

and you will please forward the numbers at your office to Belmont, S. C.

H. W. H.—*Marlboro, S. C.*—The request of Pee Dee shall be attended to. The money sent by you in April was received in our absence and credited.

Hon. J. L. Orr, will accept our acknowledgements for a bound volume of the President's Message and accompanying documents.

J. M. S., *Hightower, Ga.*—We regret your communication came to hand too late for this number; we will endeavor to make room for it in our next.

P. M. *Treadaway, S. C.*—We have no recollection of receiving such notice before this.—Have made the transfer to Augusta.

P. M., *Indian Town, S. C.*—All right.

After our form was made up, we received a letter from Mr. Stokes, which if received earlier, would have prevented the appearance of the extract from the *Patriot*, and rendered unnecessary the accompanying remarks, as we presume the matter will be satisfactorily explained in both the *Patriot* and *Herald*.



PENDLETON FARMERS' SOCIETY.

A Stated Meeting of the Society will be held on the second Thursday in August. Members generally are requested to attend, as business of importance will be brought before it.

July 14, 1852. 8-r.

IMPROVED COTTON GINS.

WE beg leave to call the attention of the citizens of Anderson District, and the Cotton growing regions generally, to our improved COTTON GINS, which gave such general satisfaction last season.

We can say truthfully, and challenge any other establishment to say the same, that we had but one Gin returned last season from bad performance. This is no little encouragement to us, and we trust will strongly recommend us to planters.

For several years we have been liberally patronized by the planters of Abbeville, Edgefield, and Anderson, and hope by faithful work to merit a continuance of it. Our Agents will occasionally pass through the various sections of country, and will gladly receive all orders which may be given them. Persons purchasing Gins from us can have a trial of Ten Bales of Cotton, and if they are not satisfied it will be taken away and another promptly forwarded. Our terms will be made known by our Agents, and shall be as accommodating as those of any other good establishment. In all cases Gins will be delivered free of charge, either at the Gin-house or nearest depot. All orders will be thankfully received and promptly attended to.

HENDERSON & CHISOLM.

Covington, Ga., June, 1852. 7-i (\$ru.)

AUSTRALIAN WHEAT.

VERY superior.—The berry of this grain is extra large, and makes the best of flour. It produces a greater average crop than any other variety now grown in New York. Several years' experience in its cultivation, proves that it is less liable to rust or mildew than other kinds; and as the stalk is large and strong, it is also less liable to blow down or lodge. Price, \$4 per bushel. Other varieties of wheat, such as the White Flint, Mediterranean, Black Sea, &c.

Also—Agricultural Implements of all kinds, and Field and Garden Seeds.

A. B. ALLEN & CO.

189 and 191, Water St. New York.

May 20, 1852. 7-p.

Postage.

Some of our subscribers think they are charged too much postage on the Farmer and Planter. The postage on it for one quarter (three months) is as follows:

Under 50 miles.....	1½ cents.
Over 50 and not over 300.....	2½ "
Over 300 and not over 1000.....	3½ "
Over 1000 and not over 2000.....	5 "
Over 2000 and not over 4000.....	6½ "
Over 4000.....	7½ "

MASONIC NOTICE.

THE next Regular Communication of PENDLETON LODGE, No. 34, A. F. M., will be held on Friday evening, 30th of July By order of the W. M.

W. H. D. GAILLARD,
Secretary.

SINCLAIR & CO.'S

OLD ESTABLISHED

SOUTHERN AGRICULTURAL IMPLEMENT WORKS

AND

SEED HOUSE,

No. 58, 60 and 62, Light Street,
BALTIMORE.



THE experience of thirty years relative to the proper construction of Implements and Machinery for the use of SOUTHERN FARMERS and PLANTERS, affords us an advantage that time and experience alone can give, and for the interest of our customers as well as our own, we solicit a continuance of their patronage, which will always command our most careful consideration, and by our having the advantage alluded to, insure them against the possession of a stock of Implements of light and inferior construction, and, as regards the South, of doubtful utility.—We offer for sale the following synopsis of our stock of IMPLEMENTS and SEEDS, and refer to our Illustrated Catalogue (just published) for particulars, viz:

PLOWS.

OF PLOWS, we have in our collection the largest assortment to be found in this or any other country, including the MARYLAND SELF-SHARPENING, with a Mould Board of unrivalled form, made suitable for the roughest lands and to economize labor; also, the Sinclair & Moore and Patuxent pattern, for clay and light loam; the Echelon, with 2 and 3 mould boards set regular for seeding and cultivation; several excellent Eastern and Western patterns; Subsoil Hill-side Plows, &c.

ROLLERS, HARROWS, CULTIVATORS, Grain and Hay Rakes, Ox Yokes; Grub and Bush Hooks, Churns, Post Hole Angers, Scythes and Snaths, Plow Harness, Screw Wrenches, Hay and Manure Forks, Straw and Hay Knives, Grubbing and Weeding Hoes, Ox, Trace and Halter Chains, Shovels, and Farming Tools generally.

WHEAT, CORN, AND SEED DRILLS. The entire success of our Patent Wheat Drill, the last season, and the increased demand for them, has induced us to manufacture this article extensively for the approaching season. Price \$90. The Corn and Seed Drill made on same plan, \$20.

CORN AND COBB CRUSHERS.—Of these we make several kinds—price \$25 30 and \$35 dollars. For plantation use, those at \$30 are preferable and excellent in every particular.

HUSSEY'S REAPING AND MOWING MACHINES.—Without regard to the unrivaled success of Hussey's Reaper at the late London Exhibition, we have determined to add them to our stock of Implements. Their simplicity and strength of construction and manifest perfection of operation, must result in their general adoption.

CORN SHELLERS.—The Improved Single and Double Spout (price \$10 @ \$16) are our best hand power machines; and the Cylindrical at \$30, for large crops. Several other patterns are made at \$16 @ \$80.

STRAW AND FODDER CUTTERS.—The Two Knife Cylindrical, rates first in value; of these we make 4 sizes, at \$25 to \$45.—Green's Double Cylinder Hay and Straw Cutters—price \$10 to 30. Common sorts, \$5 to 12.

DOMESTIC CORN MILL.—The preferred size for plantation use, is the 30 inch Cologne and French Burr Stone—price \$110 to 135. Iron Plate or Negro Hominy Mills, \$9 @ 10.

HORSE POWERS.—Sweep and Railway, of various sizes, for 1 to 12 horses—price \$75 to 135.

THRESHING MACHINES.—Made with open Wrought Iron Cylinders—most excellent and effectual—price \$35 to 60.

WHEAT FANS, with Separating Fixtures, and warranted equal in efficiency to any in this market—price, \$25, 30 @ 35.

PLOW AND MACHINE CASTINGS.—Of all the various sorts suitable for Plows or Machinery—prices reduced.

GARDEN AND FIELD SEEDS.—Our stock of Garden Seeds are principally from the Clairmont Gardens, grown under our immediate supervision—such as we find necessary to import, are obtained from seed establishments in the South of Europe, where they become quite as well matured as those raised in this latitude. The following kinds, or a synopsis of our stock of Seeds, are in store and for sale, viz: Mangle Wurtzel; Large Red and Yellow Globe Ratabaga; Hybrid and Large White Table Turnip; White Sugar and Blood Beet, extra fine; Large White Field and Table Carrot, superior; Large Heading, Savory and Early Cabbage Seeds; Early Corn, Cucumber, Lettuce, early and late; Melons, Onion Seed, Parsnip, Early and Late Peas, several new sorts; Early and Late Potatoes, Radish Seed, Squash, Tomato, Herb Seeds; Flower Seeds, 300 fine sorts.—Also, American Grass Seeds, of every description—Lucerne Vetches or Tares, English Rye Grass, Sweet Scented Vernal Grass, English and American LAWN GRASS SEED, Herd and Sheep Fescue Grass, Crested Dog's Tail, &c.

FRUIT AND ORNAMENTAL TREES AND PLANTS.—Orders will be received for the Clairmont Nurseries, now conducted by Wm. Corse, whose assortment of Fruit and Ornamental Trees, Plants, &c., is extensive, carefully grown and set out with care.

April 1.